

This listing of the claims replaces any and all prior versions and listings of claims in the application:

LISTING OF THE CLAIMS

1 (currently amended): A slider assembly comprising a plurality of sliders bonded by a debondable solid encapsulant, wherein the encapsulant is comprised of a blend of styrene and butadiene polymers, said encapsulant blend providing markedly improved performance, with improved toughness and filling characteristics, each slider has a surface that is free from the encapsulant, and the encapsulant-free surfaces are coplanar to each other.

2 (Original): The slider assembly of claim 1, having a contiguous planar surface comprised of at least one encapsulant region and containing the coplanar slider surfaces.

3 (Original): The slider assembly of claim 2, wherein the sliders are arranged in an array.

4 (Original): The slider assembly of claim 3, wherein the array is a rectilinear array.

5 (Original): The slider assembly of claim 4, wherein the sliders do not contact each other.

6 (Original): The slider assembly of claim 4, wherein the coplanar surfaces of the sliders are each an air-bearing surface.

7 (Original): The slider assembly of claim 6, further comprising a substrate in contact with the air-bearing surfaces.

8 (Original): The slider assembly of claim 7, wherein the substrate is comprised of a laminate of a flexible tape and an adhesive, wherein the adhesive is in contact with the air-bearing surfaces.

9 (Original): The slider assembly of claim 8, wherein the adhesive is a pressure sensitive adhesive.

10 (Original): The slider assembly of claim 8, wherein the adhesive preferentially adheres to the tape over the air-bearing surfaces.

11 (Original): The slider assembly of claim 4, wherein the encapsulant does not substantially outgas under vacuum.

12 (Original): The slider assembly of claim 4, further comprising a carrier attached to the encapsulant and/or at least one slider, wherein the carrier does not cover any of the coplanar slider surfaces.

13 (Original): The slider assembly of claim 6, further comprising a resist layer on the air-bearing surfaces, wherein the encapsulant is mechanically stable upon exposure to the resist layer or any component thereof.

14 (Original): The slider assembly of claim 13, wherein the encapsulant is subject to solvation by a solvent not found in the resist layer.

Claims 15-18 (cancelled)

19 (Original): The slider assembly of claim 4, wherein the styrene and butadiene polymers are present in a weight ratio of about 19:1 to about 17:3.

20 (Original): The slider assembly of claim 19, wherein the styrene and butadiene polymers are present in a weight ratio of about 9:1.

21 (Withdrawn): A method for forming a slider assembly, comprising:

(a) arranging a plurality of sliders each having a surface such that the surfaces are coplanar to each other;

(b) dispensing an encapsulation fluid comprised of styrene and butadiene polymers in a manner effective to bond or encapsulate the sliders without contacting the coplanar slider surfaces; and

(c) subjecting the dispensed encapsulation fluid to conditions effective for the fluid to form a debondable solid encapsulant comprising styrene and butadiene polymers.

22 (Withdrawn): The method of claim 21, wherein step (a) comprises placing the sliders on a laminate of a tape and an adhesive such that slider surfaces contact the adhesive.

23 (Withdrawn): The method of claim 22, wherein the adhesive is resistant or impervious to solvation by the encapsulation fluid.

24 (Withdrawn): The method of claim 21, wherein the encapsulation fluid is further comprised of a solvent.

25 (Withdrawn): The method of claim 24, wherein the solvent represents about 30 wt% to about 50 wt% of the encapsulation fluid as dispensed.

26 (Withdrawn): The method of claim 25, wherein the solvent represents about 40 wt% to about 45 wt% of the encapsulation fluid as dispensed.

27 (Withdrawn): The method of claim 24, wherein step (c) comprises heating the encapsulation fluid to remove solvent therefrom.

28 (Withdrawn): The method of claim 27, wherein step (c) subjecting the encapsulation fluid to a temperature of at least about 140 °C.

29 (Withdrawn): A method for patterning an air-bearing surface of a slider, comprising:
(a) applying a resist layer on an air-bearing surface of a slider, wherein at least a portion of the slider other than the air-bearing surface is encapsulated in a debondable solid encapsulant comprising styrene and butadiene polymers;

(b) removing a portion of the resist composition to uncover a portion of the air-bearing surface in a patternwise manner; and

(c) adding material to and/or removing material from the exposed portion of the air-bearing surface, thereby patterning the air-bearing surface of the slider,

wherein the encapsulant is mechanically stable upon exposure to any fluid employed in steps (a), (b), and/or (c).

30 (Withdrawn): The method of claim 29, further comprising, after step (a) and before step (b), exposing the resist layer to photons in the patternwise manner.